

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (previously presented): A piezoelectric ceramic composition characterized by containing:

metallic element K;

metallic element Na;

metallic element Nb;

M1, which represents a divalent metallic element, or a metallic element combination formally equivalent to a divalent metallic element;

M2, which represents a tetravalent metallic element, or a metallic element combination formally equivalent to a tetravalent metallic element;

M3, which represents a metallic element of a sintering aid component and which is at least one of Fe, Co, Ni, Mg, Zn, and Cu; and

non-metallic element O, wherein, when K, Na, Nb, M1, and M2 constitute the formula $[(1/2)aK_2O - (1/2)bNa_2O - cM1O - (1/2)dNb_2O_5 - eM2O_2]$, a, b, c, d, and e in the formula satisfy the following relations:

$$0 < a < 0.5,$$

$$0 < b \leq 0.25,$$

$$0 < c < 0.11,$$

$$0.4 < d < 0.56,$$

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$$0 < e < 0.12,$$

$$0.4 < a + b + c \leq 0.5, \text{ and}$$

$a + b + c + d + e = 1$; and when the total amount of K, Na, Nb, M1, and M2 as reduced to corresponding oxides is 100 parts by mass, the amount of M3 as reduced to M3 oxide is 5 parts by mass or less.

2. (original): A piezoelectric ceramic composition as described in claim 1, wherein, when the total amount of K, Na, Nb, M1, and M2 as reduced to corresponding oxides is 100 parts by mass, the amount of M3 as reduced to M3 oxide is 0.1 parts by mass or less.

3. (currently amended): A piezoelectric ceramic composition as described in claim 1 ~~or 2~~, wherein M1 is at least one of Ca, Sr, Ba, (Bi_{0.5}Na_{0.5}), and (Bi_{0.5}K_{0.5})

4. (currently amended): A piezoelectric ceramic composition as described in ~~any of claims 1 through 3~~ claim 1, wherein M2 is at least one of Ti, Zr, and Sn.

5. (canceled).

6. (currently amended): A piezoelectric ceramic composition as described in ~~any of claims 1 through 4~~ claim 1, wherein M3 is a combination of Cu and at least one of Fe, Co, Ni Mg, and Zn.

7. (currently amended): A piezoelectric ceramic composition as described in ~~any of~~
~~claims 1, 2, 3, 4, and 6~~claim 1, wherein a, b, and d in the formula satisfy the following relation:
$$(a + b)/d \leq 1.00.$$

8. (currently amended): A piezoelectric ceramic composition as described in ~~any of~~
~~claims 1, 2, 3, 4, 6, and 7~~claim 1, wherein a, b, and c in the formula satisfy the following
relation: $0 < c/(a + b + c) \leq 0.20.$

9. (currently amended): A piezoelectric ceramic composition as described in ~~any of~~
~~claims 1, 2, 3, 4, 6, 7, and 8~~claim 1, which contains, in addition to K, Na, Nb, M1, M2, and M3,
metallic element Li, wherein at least one of K and Na in the formula is partially substituted by
Li.

10. (currently amended): A piezoelectric ceramic composition as described in ~~any of~~
~~claims 1, 2, 3, 4, 6, 7, 8, and 9~~claim 1, which contains, in addition to K, Na, Nb, M1, M2, and
M3, metallic element Ta, wherein Nb in the formula is partially substituted by Ta.

11. (currently amended): A piezoelectric ceramic composition as described in ~~any of~~
~~claims 1, 2, 3, 4, 6, 7, 8, 9, and 10~~claim 1, which contains, in addition to K, Na, Nb, M1, M2, and
M3, metallic element Sb, wherein Nb in the formula is partially substituted by Sb.

12. (currently amended): A piezoelectric ceramic composition as described in ~~any of~~

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~~claims 1, 2, 3, 4, 6, 7, 8, 9, 10, and 11~~claim 1, which has a perovskite crystal structure.

13. (original): A piezoelectric ceramic composition as described in claim 12, wherein perovskite crystals belong to an orthorhombic system.

14 (currently amended): A piezoelectric element characterized by comprising a piezoelectric member formed of a piezoelectric ceramic composition as recited in ~~any of claims 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, and 13~~claim 1; and at least a pair of electrodes which are in contact with the piezoelectric member.